

## Claims

1. A reflow furnace having a heater for blowing hot air installed in a preheating zone and a main heating zone,  
5 characterized in that a perforated plate having a large number of discharge holes formed therein is installed in a hot air discharge portion of the heaters for blowing hot air, and the total area of the discharge holes per unit area of the perforated plate of the heater for blowing hot air installed in the main  
10 heating zone is 1.5 - 5 times the total area of the discharge holes per unit area of the perforated plate of the heater for blowing hot air installed in the preheating zone.

2. A reflow furnace as set forth in claim 1 characterized  
15 in that the number of discharge holes formed per unit area in the perforated plate of the heater for blowing hot air installed in the main heating zone is the same as the number of discharge holes per unit area in the perforated plate of the heater for blowing hot air installed in the preheating zone, but the  
20 diameter of the discharge holes of the heater for blowing hot air installed in the main heating zone is larger than the diameter of the discharge holes of the heater for blowing hot air installed in the preheating zone.

25 3. A reflow furnace as set forth in claim 1 characterized in that the diameter of the discharge holes of the heater for blowing hot air installed in the main heating zone is the same as

the diameter of the discharge holes of the heater for blowing hot air installed in the preheating zone, but the number of discharge holes per unit area of the perforated plate of the heater for blowing hot air installed in the main heating zone is larger than the number of discharge holes per unit area in the perforated plate of the heater for blowing hot air installed in the preheating zone.

4. A reflow furnace as set forth in claim 1 characterized in that the number of discharge holes per unit area in the perforated plate of the heater for blowing hot air installed in the main heating zone is larger than the number of discharge holes per unit area in the perforated plate of the heater for blowing hot air installed in the preheating zone, and the diameter of the discharge holes in the heater for blowing hot air installed in the main heating zone is larger than the diameter of the discharge holes of the heater for blowing hot air installed in the preheating zone.

5. A heater for blowing hot air characterized in that electric heaters are arranged inside a box-shaped body, the body is divided by two partitions into a suction portion at the center and discharge portions on both sides thereof, the upper portion of the suction portion is formed into a narrow suction portion by two partitions which slope inwards, openings which connect the suction portion and the discharge portions are formed in the lower portions of the two partitions, a blower is installed in

the lower portion of the suction portion, the discharge portions have a larger area than the suction portions, and perforated plates having a large number of discharge holes formed therein are installed on the upper portions of the discharge portions.

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6. A heater for blowing hot air as set forth in claim 5 characterized in that the surface of the perforated plates is coated with a black ceramic.